AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings of claims in the application:

LISTING OF CLAIMS:

1. (previously presented) Method for analyzing adducts in a fluid and/or solid material suspected of containing said adducts, wherein said adduct is an N-adducted amino acid or adducted N-terminal peptide/protein, comprising the following steps:

a) bringing said fluid and/or solid material in direct contact with an isothiocyanate reagent wherein said reagent is an isothiocyanate reagent containing a fluorescent moiety and an ionizable moiety selected from the group consisting of FITC, DNITC and DABITC or a derivative thereof;

b) allowing said reagent to react with adducted N-terminals in proteins or peptides present in said fluid and/or solid material;

c) separating the analytes formed from the reaction mixture; and

d) detecting the analytes formed, and optionally visualizing the result, wherein step c) is performed using LC and step d) is performed using MS detection.

2. (original) A method according to claim 1 wherein the detection step d) is followed by a step e) comparing the results from the detection step d) with previously obtained results, obtained using steps a) - d), which previously obtained results emanate from a standard material formed from the adduct under scrutiny, and optionally calculating a quotient between said results and optionally presenting said quotient visually.

3. (previously presented) A method according to claim 1 wherein said adducted N-terminals have their adducts attached to a secondary N-terminal valine in hemoglobin, a secondary N- terminal asparagine in serum albumin or to a secondary N-terminal glycine in myoglobin.

4. (original) A method according to claim 1 wherein said adduct is a globin adduct.

5. (original) A method according to claim 1 wherein said adduct is a hemoglobin or a myoglobin adduct.

6. (original) A method according to claim 1 wherein said adduct is a serum albumin adduct.

7-9. (canceled)

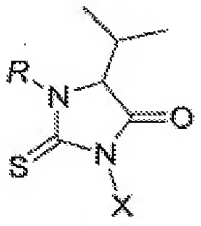
10. (previously presented) A method according to claim 1 wherein said reagent is FITC.

11-15. (canceled)

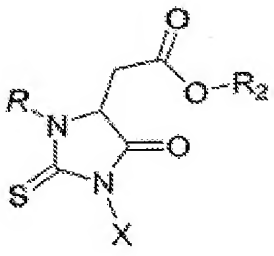
16. (currently amended) A method according to claim [[11]] 1 wherein step c) is preceded by a step for enriching the analyte present.

17. (previously presented) A method according to claim 16 wherein said enrichment step preceding step c) is performed using size-discriminating ultrafiltration, or ultracentrifugation.

18. (previously presented) A method according to claim 1 wherein said analyte is a compound according to formula I or II, or a derivative thereof:



I XTH-*R*-Val



XTH-*R*-Asp-R_2 II

wherein R represents any adduct (e.g., alkyl and aryl or substituted analogues thereof, with the exception for hydrogen) and X represents a moiety of any isothiocyanate reagent utilized in which the isothiocyanate group is directly bound to an aromatic ring or an aromatic ring system providing fluorescent and/or ionizable properties to the analyte, with the exception that X is not a phenyl, 4-bromophenyl, 4-methoxyphenyl or pentafluorophenyl group, and R_2 represents hydrogen, an alkyl, aryl, carboxyl or benzyl group or substituted analogues thereof; or a carboxyl anion group.

19. (previously presented) A method according to claim 1 wherein detection of the analyte in step d) is performed at a pH above 5.

20. (canceled)

21. (previously presented) A method according to claim 1 wherein said fluid and/or solid material is blood or processed blood, which has been obtained at an earlier stage,.

22. (canceled)

23. (previously presented) A method according to claim 21 wherein the blood is processed either by centrifugation, washing and lysating, or lysating only.

24. (previously presented) A method according to claim 23 wherein said centrifugation, washing and lysating is followed by heating at approximately 70°C.

25. (previously presented) A method according to claim 23 wherein said lysating only, is followed by heating at approximately 38°C.

26. (canceled)

27. (previously presented) A method according to claim 24 wherein the heating is followed by step c) as set out in claim 1 wherein the separation is performed by size-discriminating ultra filtration in a size-discriminating ultra filtration tube and whereupon the analyte is being bound to an ion exchange resin in said tube and thereupon purifying said analyte.

28. (original) A method according to claim 27 wherein the purifying of said analyte is performed by first washing the resin to which the analyte is bound and release the analyte from

the resin preferably by adding an acid to said resin, and subsequently filter the resin off giving the analyte in the remaining filtrate.

29. (previously presented) A method according to claim 28 wherein the detecting as set out in step d) of claim 1 is performed by using LC-MS/MS.

30. (original) A method according to claim 29 wherein alkalization of the detached analytes is performed before detecting using CE-LIF.

31. (previously presented) A method according to claim 25 wherein the heating is followed by step c) as set out in claim 1 wherein the separation is performed by size-discriminating ultra filtration in a size-discriminating ultra filtration tube and wherein the analyte is free in solution and present in the filtrate.

32. (previously presented) A method according to claim 31 wherein the detecting as set out in step d) of claim 1 is performed by using LC-MS/MS.

33. (previously presented) A method for manufacturing a standard material for use in a method according to claim 1 comprising the following steps:

i) reacting an N-substituted amino acid or an adducted N-terminal in a protein or a peptide with a reagent wherein said reagent is an isothiocyanate reagent containing a fluorescent and an ionizable moiety selected from the group consisting of FITC, DNITC and DABITC or a derivative thereof; and

ii) purifying the analyte, which is a thiohydantoin analyte formed, by, e.g., separating the unreacted compound from the reaction mixture.

34. (previously presented) A method according to claim 33 wherein said adducted N-terminals have their adducts attached to a secondary N-terminal valine in hemoglobin, a secondary N-terminal asparagine in serum albumin or a secondary N-terminal glycine in myoglobin.

35. (original) A method according to claim 33 wherein said adduct is a globin adduct.

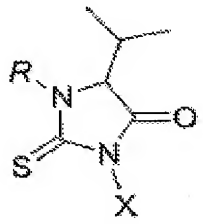
36. (original) A method according to claim 35 wherein said adduct is a hemoglobin or a myoglobin adduct.

37. (original) A method according to claim 33 wherein said adduct is a serum albumin adduct.

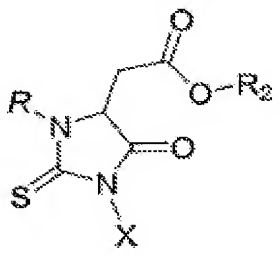
38-40. (canceled)

41. (previously presented) A method according to claim 33 wherein said reagent is FITC.

42. (previously presented) A method according to claim 33 wherein said analyte is a compound according to formula I or Il or a derivative thereof;



I XTH-*R*-Val



XTH-*R*-Asp-R_2 II

wherein R represents any adduct (e.g., alkyl and aryl or substituted analogues thereof, with the exception of hydrogen) and X represents a moiety of any isothiocyanate reagent utilized in with the isothiocyanate group is directly bound to an aromatic ring or an aromatic ring system, thereby providing fluorescent

and/or ionizable properties to the analyte, which the exception that X is not a phenyl, 4- bromophenyl, 4-methoxyphenyl or pentafluorophenyl group, and R_2 represents hydrogen; an alkyl, aryl, carboxyl or benzyl moiety or substituted analogues thereof; or a carboxyl anion group.

43. (previously presented) A method according to claim 33 wherein said analyte is a compound selected from the group consisting of 3-[4-(4-dimethylamino-phenylazo)-phenyl]-5-isopropyl-1-methyl-2-thioxo-imidazolidin-4-one (DABTH-MeVal); 3-(4-dimethylamino-naphthalen-1-yl)-5-isopropyl-1-methyl-2-thioxo-imidazolidin-4-one (DNTH-MeVal); fluorescein, 5-(4-isopropyl-3-methyl-2-thioxo-imidazolidin-5-one) (FTH-MeVal); fluorescein, 5-[4-isopropyl-3-(2-carbamoyl-ethyl)-2-thioxo-imidazolidin-5-one] (FTH-AAVal); fluorescein, 5-[4-isopropyl-3-(2-carbamoyl-2-hydroxy-ethyl)-2-thioxo-imidazolidin-5-one] (FTH-GAVal); fluorescein, 5-[4-isopropyl-3-(2-hydroxyoctadecyl)-2-thioxo-imidazolidin-5-one] (FTH-HOC_{18}Val); fluorescein, 5-[4-isopropyl-3-(2-hydroxy-propyl)-2-thioxo-imidazolidin-5-one] (FTH-HOPrVal); fluorescein, 5-{4-isopropyl-3-[17-(1,5-dimethyl-hexyl)-3,5 and/or 6-dihydroxy-10,13-dimethyl-hexadecahydro-cyclopenta[a]phenanthren-5 and/or 6-yl])-2-thioxo-imidazolidin-5-one} (FTH-CholEOVal) and fluorescein, 5-[4-isopropyl-3-(2,3,4,5,6-pentahydroxy-hexyl)-2-thioxo-imidazolidin-5-one] (FTH-GlcVal).

44. (previously presented) A standard material obtainable by the method according to claim 33.

45. (withdrawn) A compound selected from the group consisting of 3-[4-(4-dimethylamino-phenylazo)-phenyl]-5-isopropyl-1-methyl-2-thioxo-imidazolidin-4-one (DABTH-MeVal); 3-(4-dimethylamino-naphthalen-1-yl)-5-isopropyl-1-methyl-2-hioxo-imidazolidin-4-one (DNTH-MeVal); fluorescein, 5-(4-isopropyl-3-methyl-2-thioxo-imidazolidin-5-one) (FTH-MeVal); fluorescein, 5-[4-isopropyl-3-(2-carbamoyl-ethyl)-2-thioxo-imidazolidin-5-one] (FTH-AAVal); fluorescein, 5-[4-isopropyl-3-(2-carbamoyl-2-hydroxy-ethyl)-2-thioxo-imidazolidin-5-one] (FTH-GAVal); fluorescein, 5-[4-isopropyl-3-(2-hydroxyoctadecyl)-2-thioxo-imidazolidin-5-one] (FTH-HOC_{18}Val); fluorescein, 5-[4-isopropyl-3-(2-hydroxy-propyl)-2-thioxo-imidazolidin-5-one] (FTH-HOPrVal); fluorescein, 5-{4-isopropyl-3-[17-(1,5-dimethyl-hexyl)-3,5 and/or 6-dihydroxy-10,13-dimethyl-hexadecahydro cyclopenta[a]phenanthren-5 and/or 6-yl])-2-thioxo-imidazolidin-5-one} (FTH-CholEOVal) and fluorescein, 5-[4-isopropyl-3-(2,3,4,5,6-pentahydroxy-hexyl)-2-thioxo-imidazolidin-5-one] (FTH-GlcVal).

46. (canceled)

47. (withdrawn) A container for use when analyzing adducts in a fluid or a solid material suspected of containing

said adducts, wherein said container provides means for performing steps a) - c) as set out in claim 1.

48. (canceled)

49. (previously presented) A kit containing standard material according to claim 44.

50. (withdrawn) A kit containing a compound according to claim 45 and a container.

51. (withdrawn) An apparatus for performing the method according to claim 1 and providing means for performing steps a) - c) and for the detection in step d).

52. (withdrawn) A computer program stored on a data carrier for performing the method according to claim 1.

53. (currently amended) A method according to claim [[10]] 17, wherein said size-discriminating ultrafiltration is followed by an ion-exchanging step.

54. (currently amended) A method according to claim [[10]] 17, wherein said ultracentrifugation is followed by an ion-exchanging step.

55. (currently amended) A method according to claim [[14]] 1, wherein the detection of the analyte in step d) is performed at a pH of approximately 7.

56. (previously presented) A method according to claim 21 wherein said fluid and/or solid material is blood or processed blood of human origin.

57. (previously presented) A method according to claim 21 wherein said fluid and/or solid material is blood or processed blood which has been obtained at an earlier stage contained in a container.

58. (previously presented) A method according to claim 57 wherein said fluid and/or solid material is blood or processed blood which has been obtained at an earlier stage contained in a tube.

59. (previously presented) A method according to claim 24 wherein said centrifugation, washing and lysating is followed by heating at approximately 70°C for approximately 1 hour.

60. (previously presented) A method according to claim 25 wherein said lysating only, is followed by heating at approximately 38°C for approximately 18 hours.

61. (previously presented) A method according to claim 28 wherein the purifying of said analyte is performed by first washing the resin to which the analyte is bound and release the analyte from the resin by adding an acid to said resin, and subsequently filter the resin off giving the analyte in the remaining filtrate.